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Governor Brad Little Director John H. Tippets

July 19, 2019

Mr. Michael J. Lidgard NPDES Permits Unit Manager EPA Region 10 1200 Sixth Avenue, Suite 900 Seattle, Washington 98101-3140

Subject: FINAL 401 Water Quality Certification for the City of Moscow Municipal Separate Sewer System (MS4), NPDES Permit #IDS028398

Dear Mr. Lidgard:

The Lewiston Regional Office of the Department of Environmental Quality (DEQ) has reviewed the above-referenced permit for the City of Moscow MS4. Section 401 of the Clean Water Act requires that states issue certifications for activities which are authorized by a federal permit and which may result in the discharge to surface waters. In Idaho, the DEQ is responsible for reviewing these activities and evaluating whether the activity will comply with Idaho's Water Quality Standards, including any applicable water quality management plans (e.g., total maximum daily loads). A federal discharge permit cannot be issued until DEQ has provided certification or waived certification either expressly, or by taking no action.

The permit was written using Idaho's 2014 Integrated Report. Idaho's 2016 Integrated Report was approved by EPA on June 25, 2019. This resulted in a change to fully supporting the beneficial use status of the contact recreation use in the South Fork Palouse River assessment unit referenced in this permit. DEQ has noted the change in the certification. This letter is to inform you that DEQ is issuing the attached Final 401 certification subject to the terms and conditions contained therein.

Please contact me directly at 208-799-4370 to discuss any questions or concerns regarding the content of this certification.

Sincerely, John Caronall

John Cardwell

Regional Administrator Lewiston Regional Office

c: Misha Vakoc, EPA Region 10 Loren Moore, DEQ State Office

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Idaho Department of Environmental Quality Final §401 Water Quality Certification

July 19, 2019

NPDES Permit Number(s): City of Moscow Municipal Separate Storm Sewer Systems Permit, #IDS028398

Receiving Water Body: Paradise Creek & South Fork Palouse River

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon our review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The City of Moscow municipal separate storm sewer system (MS4) discharges the following pollutants of concern pertinent to Idaho WQS and applicable TMDLs: nutrients (nitrogen and phosphorus), sediment, heat, chlorides, metals, petroleum hydrocarbons, microbial pollution (*Escherichia coli*) and organic chemicals (pesticides and industrial chemicals). Terms and conditions of the permit and this certification require permittees to reduce pollutant loading to the maximum extent practicable.

Receiving Water Body Level of Protection

The City of Moscow discharges to two assessment units within the Palouse Subbasin including Paradise Creek, assessment unit (AU) 17060108CL005_02 (Paradise Creek – Urban boundary to Idaho/Washington border) and the South Fork Palouse River, assessment unit (AU) 17060108CL002_03 (South Fork Palouse River – Gnat Cr. to Idaho/Washington border). These AUs have designated cold water aquatic life and secondary contact recreation beneficial uses. The South Fork Palouse River AU is also designated for salmonid spawning beneficial uses. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2016 Integrated Report, these AUs are not fully supporting their designated uses. The aquatic life uses in the receiving water body AUs are not fully supported. Causes of impairment include temperature, sediment, nutrients, physical substrate habitat alterations, and other flow regime alterations.

The contact recreation beneficial use for Paradise Creek is not fully supported. The cause of impairment is *Escherichia coli* (*E. coli*). The contact recreation beneficial use is fully supported in the South Fork Palouse River. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.052.05.c) for the aquatic life and contact recreation uses in Paradise Creek and Tier I protection for the aquatic life uses in the South Fork Palouse River. DEQ will provide Tier II protection (IDAPA 58.01.02.051.02) in addition to Tier I for the contact recreation use in the South Fork Palouse River.

Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing and designated uses and the level of water quality necessary to protect existing and designated uses shall be maintained and protected. In order to protect and maintain existing and designated beneficial uses, a permitted MS4 discharge must reduce the discharge of pollutants to the

maximum extent practicable. The terms and conditions contained in the City of Moscow permit and this certification will reasonably assure that the permittee reduces pollutants to the maximum extent practicable.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations for point source discharges, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharge permits must contain limitations that are consistent with allocations in the approved TMDL.

Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation of provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

The EPA-approved Paradise Creek TMDL: Water Body Assessment and Total Maximum Daily Load (DEQ 1997), South Fork Palouse River Watershed Assessment and TMDLs (DEQ 2007), Paradise Creek TMDL: 2015 Bacteria Addendum (DEQ 2015), and Palouse River Subbasin 2017 Temperature TMDL (DEQ 2017) included urban stormwater system runoff inputs in nonpoint sources of pollution and the calculation of load allocations for these AUs. The TMDLs require small MS4 operators to obtain a NPDES permit, implement a comprehensive stormwater management and monitoring program, and use BMPs to reduce pollutants of concern in stormwater discharges to the maximum extent practicable. These load allocations were designed to restore the water quality of these AUs to the level necessary to support designated aquatic life and contact recreation beneficial uses and comply with the applicable water quality criteria. The implementation of a comprehensive stormwater management program which includes targeted pollutant reduction activities through BMP implementation and pollutant assessment and monitoring in each impaired AU by the City of Moscow is consistent with the Paradise Creek and South Fork Palouse River TMDLs.

The Paradise Creek TMDL: Water Body Assessment and Total Maximum Daily Load (DEQ 1997) contained targets for fecal coliform. In 1986, EPA updated its criteria to protect recreational use of water by recommending an E. coli criterion as a better indicator than fecal coliform of bacteria levels that may cause gastrointestinal distress in swimmers¹. Using E. coli as an indicator for the bacteria criterion is as, or more, protective of water quality than using fecal coliform. In 2000, DEQ changed its bacteria criterion from fecal coliform to E. coli (IDAPA 58.01.02.251.01). The Paradise Creek TMDL: 2015 Bacteria Addendum (DEQ 2015) addressed this change in the contact recreation use criterion. Accordingly, fecal coliform is not considered a pollutant of concern in this AU.

The MS4 NPDES permit contains clear, specific, and measurable provisions for the continued implementation of specific controls, management practices, control techniques, and system design and engineering methods to achieve the effluent limitation requirements in the permit. The permittee is discharging to impaired waterbodies and will be required to conduct additional targeted pollutant reduction and assessment activities in accordance with Part 4 of the permit in order to protect water quality and reduce pollutants to the maximum extent practicable. Upon the effective date of the permit, the permittee must begin to develop and implement the Stormwater

City of Moscow Municipal Separate Storm Sewer Systems Permit, #IDS028398

¹ U.S. EPA 1986, EPA's Ambient Water Quality Criteria for Bacteria 1986. U.S. Environmental Protection Agency: Washington, DC. EPA440/5-84-00

Management Program (SWMP) controls measures outlined in Part 3 of the permit. The SWMP control measure components must be fully implemented no later than the specified compliance dates. Compliance with these conditions of the permit provides DEQ reasonable assurance that the permittee will protect and maintain beneficial uses to the maximum extent practicable.

Specific terms and conditions of the permit aimed at providing a Tier I level of protection and compliance with the Paradise Creek and South Fork Palouse River TMDLs include:

- A prohibition on snow disposal directly to surface waters;
- Specific prohibitions for non-stormwater discharges;
- Requirements to develop/revise a stormwater management plan with the following control measures:
 - Public education and outreach,
 - o Illicit discharge detection and elimination,
 - o Construction site stormwater runoff controls,
 - o Post-construction stormwater management for new and redevelopment,
 - o Pollution prevention/good housekeeping for MS4 operations;
- Quantitative monitoring/assessment of pollutants of concern removed by BMPs in conjunction with required maintenance in all impaired AUs;
- Required pollution reduction activities in all impaired AUs;
- The stipulation that if either EPA or DEQ determines that a MS4 causes or contributes to an excursion above the WQS, the permittee must take a series of actions to remedy the situation.

If the MS4 discharge causes or contributes to an excursion above the applicable Idaho WQS, Part 5 of the permit outlines corrective action and adaptive management as needed to address the source of pollutants. This response plan outline will likely improve the response time to an exceedance and require the permittee to evaluate and determine the effectiveness of their BMPs.

In sum, the limitations and associated requirements contained in the City of Moscow MS4 NPDES permit are set at levels that reasonably assure reduction in the discharge of pollutants and support of beneficial uses to the maximum extent practicable, and are consistent with the load allocations established in the applicable TMDLs. Therefore, DEQ has reasonable assurance the permit will protect and maintain existing and designated beneficial uses in Paradise Creek and the South Fork Palouse River in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier II Protection)

The South Fork Palouse River is considered high quality for secondary contact recreation. As such, the water quality relevant to these uses must be maintained and protected, unless a

lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to secondary contact recreation uses of the South Fork Palouse River (IDAPA 58.01.02.052.06). Pollutants relevant to recreational uses include the following: microbial pollution (*E. coli*), nutrients, metals, petroleum hydrocarbons, and organic chemicals (pesticides and industrial chemicals).

For a new permit or license, the effect on water quality is determined by reviewing the difference between the existing receiving water quality and the water quality that would result from the activity or discharge as proposed in the new permit or license (IDAPA 58.01.02.052.06.a). NPDES permits for regulated small municipal separate storm sewer systems (MS4s) must include terms and conditions to reduce the discharge of pollutants to the statutory standard of "maximum extent practicable." The proposed MS4 permit relies on practices to identify and reduce discharge of pollutants to the maximum extent practicable (Permit Part 2 and 3). Further, the permittees' implementation of these practices must be documented in annual reports to EPA and DEQ and is subject to review and on-site inspections. To ensure discharged stormwater will not degrade receiving waters, the permittees are required to manage the effectiveness of these stormwater management practices, monitor discharge and receiving water quality and, if necessary, adapt its management practices. The City of Moscow must map their MS4 and all associated outfalls (Permit Part 3.2.2).

Pollutant reductions should be realized as each element of the stormwater management plan is developed and implemented during the permit cycle. Stormwater control measures, when designed, constructed, and maintained correctly have demonstrated the ability to reduce runoff, erosive flows, and pollutant loadings². Due to the nature of MS4 permits, implementation requires investigating and resolving complaints; continual discovery of pollutant sources, including illicit discharge detection and elimination; use, monitoring, and refinement of BMPs; and additional knowledge through training opportunities. Water quality is expected to improve in the South Fork Palouse River as a result of conducting pollutant reduction activities (Permit Part 4.3).

This level of scrutiny and effort combined with requirements to address pollution sources should lead to improved water quality the longer the permit is in effect and should result in minimal to no adverse change in existing water quality significant to recreational uses. Therefore, DEQ has reasonable assurance that insignificant or no degradation will result from the discharge of pollutants from the City of Moscow MS4.

In summary, DEQ concludes that this discharge permit complies with the Tier II provisions of Idaho's WQS (IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06).

² Urban Stormwater Management in the United States, National Research Council, 2008

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

Best Management Practices

Best management practices must be designed, implemented, and maintained by the permittee to protect and maintain the beneficial uses of waters of the United States and to reduce the discharge of pollutants to the maximum extent practicable.

When selecting best management practices, the permittees must consider and, if practicable, utilize practices identified in the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties (http://www.deq.idaho.gov/water-quality/wastewater/stormwater/).

Pollutant Reduction Activities in Paradise Creek and the South Fork Palouse River

In carrying out the requirements of Part 4.3 of the permit, the permittees must define and implement at least one (1) pollutant reduction activity designed to reduce *E. coli*, nutrients, sediment, and heat loadings from the MS4 into Paradise Creek.

In carrying out the requirements of Part 4.3 of the permit, the permittees must define and implement at least one (1) pollutant reduction activity designed to reduce nutrients, sediment, and heat loadings from the MS4 into the South Fork Palouse River.

Reporting of Discharges Containing Hazardous Materials or Deleterious Material

All spills of hazardous material, deleterious material or petroleum products which may impact waters (ground and surface) of the state shall be immediately reported. Call 911 if immediate assistance is required to control, contain or clean up the spill. If no assistance is needed in cleaning up the spill, contact the Lewiston Region DEQ office during normal working hours at 208-799-4370 or Idaho State Communications Center after normal working hours. If the spilled volume is above federal reportable quantities, contact the National Response Center.

For immediate assistance: Call 911

National Response Center: (800) 424-8802

Idaho State Communications Center: (800) 632-8000

Other Conditions

This certification is conditioned upon the requirement that any material modification of the permit or the permitted activities including significant changes to the permit, any modifications of the permit to reflect new or modified TMDLs, load allocations, amended NOI, site-specific criteria, variances, or other new information shall first be provided to DEQ for review to

6

determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Sujata Connell, Lewiston Regional Office, 208-799-4370 or Sujata.Connell@deq.idaho.gov.

John Cardwell

Regional Administrator Lewiston Regional Office

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